## US Geological Survey FGDC Annual Report to OMB FY 2003

## Part A GENERAL FEDERAL AGENCY RESPONSIBILITIES REPORT (All Agencies)

1. Agency or Bureau: US Geological Survey

2. Name of Contact for Report: Email: hjrossmeissl@usgs.gov

Phone #: **703-648-5577** 

Steering Committee Member: Email: cgroat@usgs.gov

Phone # **703-648-7411** Email: <u>ksiderelis@usgs.gov</u> Phone #: **703-648-574** 

4. Coordination Group Participant(s): Email: hjrossmeissl@usgs.gov

Phone #: **703-648-5577**Email: rpearsall@usgs.gov
Phone: **703-648-4532** 

- 5. Subcommittee or Working Group Participation (Subcommittees or Working Groups your agency is involved with, but does not lead)
  - a. Subcommittees
    - i. Cadastral
    - ii. Cultural and Demographic
    - iii. Federal Geodetic Control
    - iv. Ground Transportation
    - v. International Boundaries and Sovereignty
    - vi. Marine and Coastal Spatial Data
    - vii. Soils
    - viii. Vegetation
    - ix. Wetlands
  - **b.** Working Groups
    - i. Clearinghouse
    - ii. Facilities
    - iii. Geospatial Applications and Interoperability
    - iv. Historical data
    - v. Marine Boundaries
    - vi. Metadata
    - vii. Sample Inventory and Monitoring of Natural Resources and the Environmental Department of Agriculture
    - viii. Standards
    - ix. Tribal
- **6.** Strategy: Has your agency prepared a detailed strategy for integrating geographic information and spatial data activities into your business process in coordination with the FGDC strategy, pursuant to OMB Circular A-16? If yes, briefly describe. **Yes** 
  - a. USGS policies specify that geospatial data sets be publicly accessible with published metadata and posted on a NSDI node. The USGS follows the FGDC strategy and Guidelines found in OMB Circular A-16 to employ standards when collecting geospatial data, register new geospatial data on the NSDI, and participate in the OMB Circular A-16 annual request for DOI High Priority Data Requirements to coordinate future data collection. The USGS also actively participates in the development of international and national geospatial data standards, consistent with OMB Circular A-119. These strategies are further described, elaborated, and documented in appropriate USGS Capital Asset Plans (Exhibit 300) and OMB PART documents.

- 7. Compliance: How are your spatial data holdings compliant with FGDC Standards? Also, please list the FGDC Standards you are using or plan to use in your organization.
  - a. Yes, USGS Programs employ FGDC guidance and collect new data to appropriate standards including data content standards and metadata standards. FGDC Standards the USGS are using or plan to use include:
    - i. ANSI Profile of ISO 19115 (as a replacement for FGDC-STD-001-1998)
    - ii. Content Standard for Digital Geospatial Metadata (version 2.0), FGDC-STD-001-1998 (to be replaced by the ANSI Profile of ISO 19115)
    - iii. Content Standard for Digital Geospatial Metadata: Extensions for Remote Sensing Metadata
    - iv. Content Standard for Digital Orthoimagery, FGDC-STD-008-1999
    - v. Content Standard for Framework Land Elevation Data (or its predecessor)
    - vi. Content Standard for Digital Geospatial Data, Biological Profile, FGDC-SDT- 001.1- 1999 and work to develop a Biological Nomenclature and Taxonomy Data Standard.
    - vii. Digital Cartographic Standard for Geologic Map Symbolization (Draft stage)
    - viii. Geologic data model standard is being developed and prototyped by various state, federal and foreign geological surveys, under the aegis of the North American Data Model Steering Committee (NADMSC), this standard conceptual data model will be proposed to the FGDC.
    - ix. Federal Standards for Delineation of Hydrologic Unit Boundaries. (Draft Stage)
    - x. Geospatial Accuracy Standard, Parts 1 & 3, FGDC-STD-007.1 & FGDC-STD-007.3
    - xi. Geospatial One-Stop Framework Data Standards
    - xii. National Hydrography Framework Geospatial Data Content Standard
    - xiii. National Standards for the Floristic Levels of Vegetation Classification in the United States: Associations and Alliances
    - xiv. Anderson Land Cover Classification standard
    - xv. NSDI Framework Transportation Identification Standard (or its predecessor)
    - xvi. Spatial Data Transfer Standard, ANSI NCITS 320:1998 (formally FGDC-STD-002)
    - xvii. US. National Grid, FGDC-STD-11-2001
- 8. Redundancy: Prior to collecting data, how does your agency ensure that the data are not already available?
  - a. USGS maintains a website of existing geospatial data holdings. As new data are developed, they are registered on the website. When a new project is begun, existing data within USGS are identified and searches are conducted of the NSDI to locate data available through any other source.
  - b. The USGS administers the Partnership programs such as the DOI High Priority Program where the member data acquisition strategies, activities, and requirements are shared and funding leveraged.
  - c. USGS is an active member of partnership entities to include several consortia, such as the National Digital Elevation Program and National Digital Orthophoto Program, where plans for data collections are shared.
- 9. Collection: Do your agency contracts and grants involving data collection include costs for NSDI standards? **Yes** 
  - a. Procurements and contracts for data or data services specify compliance with appropriate ANSI and FGDC Standards. Contracts for data include the

full cost of creating compliant data using appropriate standards; also providing the metadata and registering the data online.

- 10. Clearinghouse: Is all the data and/or metadata that your agency is able to share with the public published on the NSDI Clearinghouse? **Yes** If not, please cite barriers encountered.
  - a. All geospatial data that USGS programs produced that have been reviewed and approved for public use are published on the NSDI Clearinghouse. Some data sets are "published" by also posting to a local website. Working copies of data might not be made publicly available. The USGS maintains over 22 NSDI Clearinghouse nodes.
  - b. Members actively discuss and share data acquisition strategies and seek out leverage funding opportunities.
- 11. E-Gov: How are you using geospatial data in your mission activities to provide better services? (Please list)
  - a. Geospatial data are used daily as the USGS executes its mission responsibilities. The USGS provides public access to its geospatial data holdings in both electronic and printed form compliant with FGDC standards and guidance. Electronic copies, compliant with directives such as Section 508 of the Rehabilitation Act, are available via the world wide web or on other media. As an agency responsible for conducting objective, independent science, the USGS ensures the preservation of its work in accordance with NARA archive and data preservation policies. Sustainable partnerships are continually sought that help reduce duplication of effort and ensure access and preservation of geospatial data and information consistent with mission responsibilities and requirements.
- 12. Geospatial One-Stop: How is your agency involved in the Geospatial One-Stop?
  - a. The USGS has lead agency responsibility for the Hydrology, Elevation, and Orthoimagery Theme. These theme data are accessible via the Geospatial One-Stop Portal (<a href="www.geodata.gov">www.geodata.gov</a>) and The National Map Portal (<a href="www.nationalmap.usgs.gov">www.nationalmap.usgs.gov</a>). The USGS is also a participating member on 2 other theme activities.
- 13. Enterprise Architecture: Is geospatial data a component of your enterprise architecture? Yes Please provide a brief summary of how geospatial data fits into your enterprise architecture.
  - a. The USGS is in the process of constructing an Enterprise Architecture document. The USGS developed Exhibit 300 in the areas of Enterprise Web and Enterprise GIS that highlight Bureau-wide strategies in presenting, searching, cataloging, and serving information across the world wide web, and organizing and analyzing information through Geographic Information Systems as part of a Bureau enterprise architecture.
- 14. Partnerships: What efforts are being taken to coordinate data and build partnerships at the field level for data collection and standards development? Identify partnerships and data sharing activities with other federal agencies, state, local, and tribal governments and other entities.
  - a. The USGS actively seeks out sustainable partners in all of its geospatial data activities. Through special interest consortia (e.g. National Digital Elevation Program, National Digital Orthophoto Program, National Hydrologic Data partners) the USGS actively engages Federal, State, and local agencies and organizations for partnership opportunities. The Geography Discipline has identified Partnerships as one of the 4 PART Goals. Recent business organization and process restructuring has regionalized and localized many of the data coordination activities. The USGS also actively participates in the FGDC Subcommittees and Working Groups, working to coordinate and partner on geospatial data activities.

- 15. Concerns or Lessons Learned: Are there areas or issues regarding spatial data that require attention, or lessons learned that you would like to share with others? Please describe.
  - Standards development takes time and careful coordination with the States and locals who have a vested interest in the collection and use of the data.
     Agencies responsible for leading this coordination need funds dedicated to this effort
  - b. The NSDI business case and implementation of that business case for data and information sharing has seen little success over the 8+ years since EO12906. Agency activities and funding are primary driven by agency missions and appropriated funding, operating differently and separately from NSDI coordination. Collaborative funding strategies need to be developed that will facilitate for example, the implementation of web mapping services where costs can be shared across agencies.